



# **Midway Opportunity Overview**

October 2016

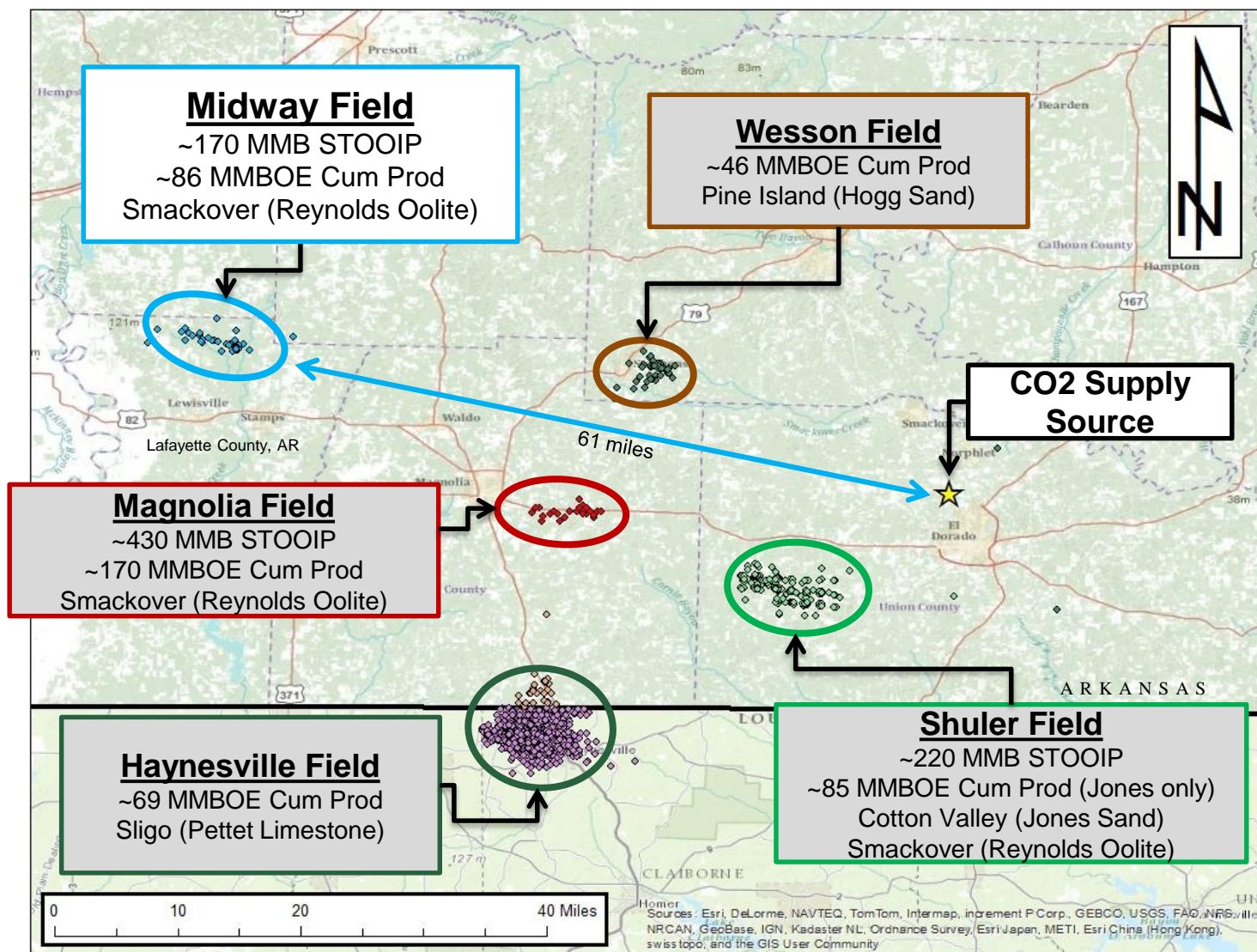


# Overview of Midway Field

- Located in Lafayette County, Arkansas
- ~155 BOPD production (35° API)
- Recovery to date: ~86 mmstb (51% of OOIP) via waterflood
  - Excellent reservoir connectivity
  - Pressure maintenance water injection commenced May 1943
- Field generates positive cash flow
- ~83% NRI ; 97% WI; Operator of Unit
  - includes ~9% NRI / 10% WI via non-consents on 2015 capex
- Attractive CO<sub>2</sub> EOR Development (40+ mmstb) planned
  - Reservoir simulation (w/ history match) indicates high performance CO<sub>2</sub> flood
  - Attractive project economics at current oil price
  - Development plan ready; reservoir pressure already above miscibility
  - CO<sub>2</sub> supply contracted at attractive price

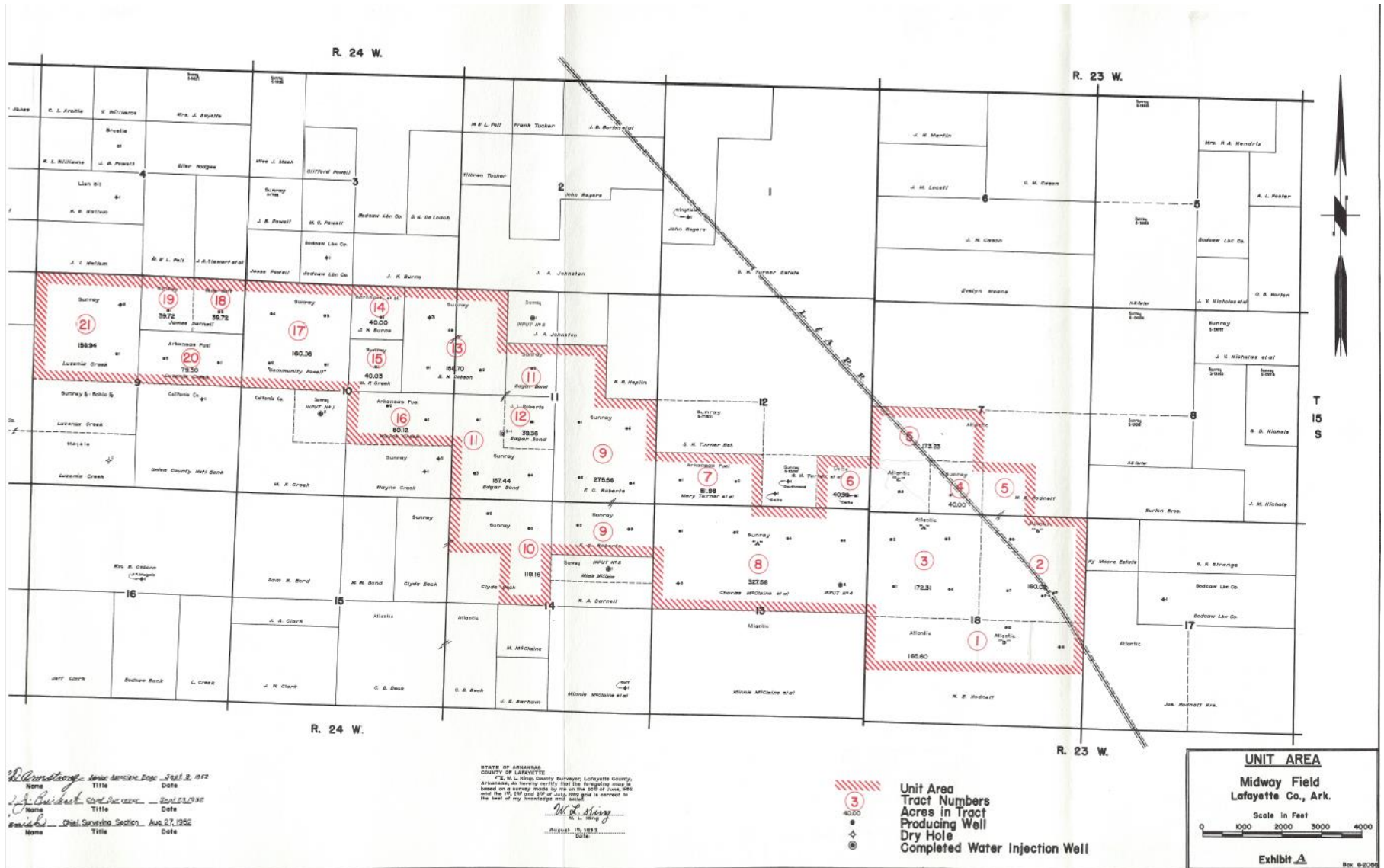


# Midway Field Location



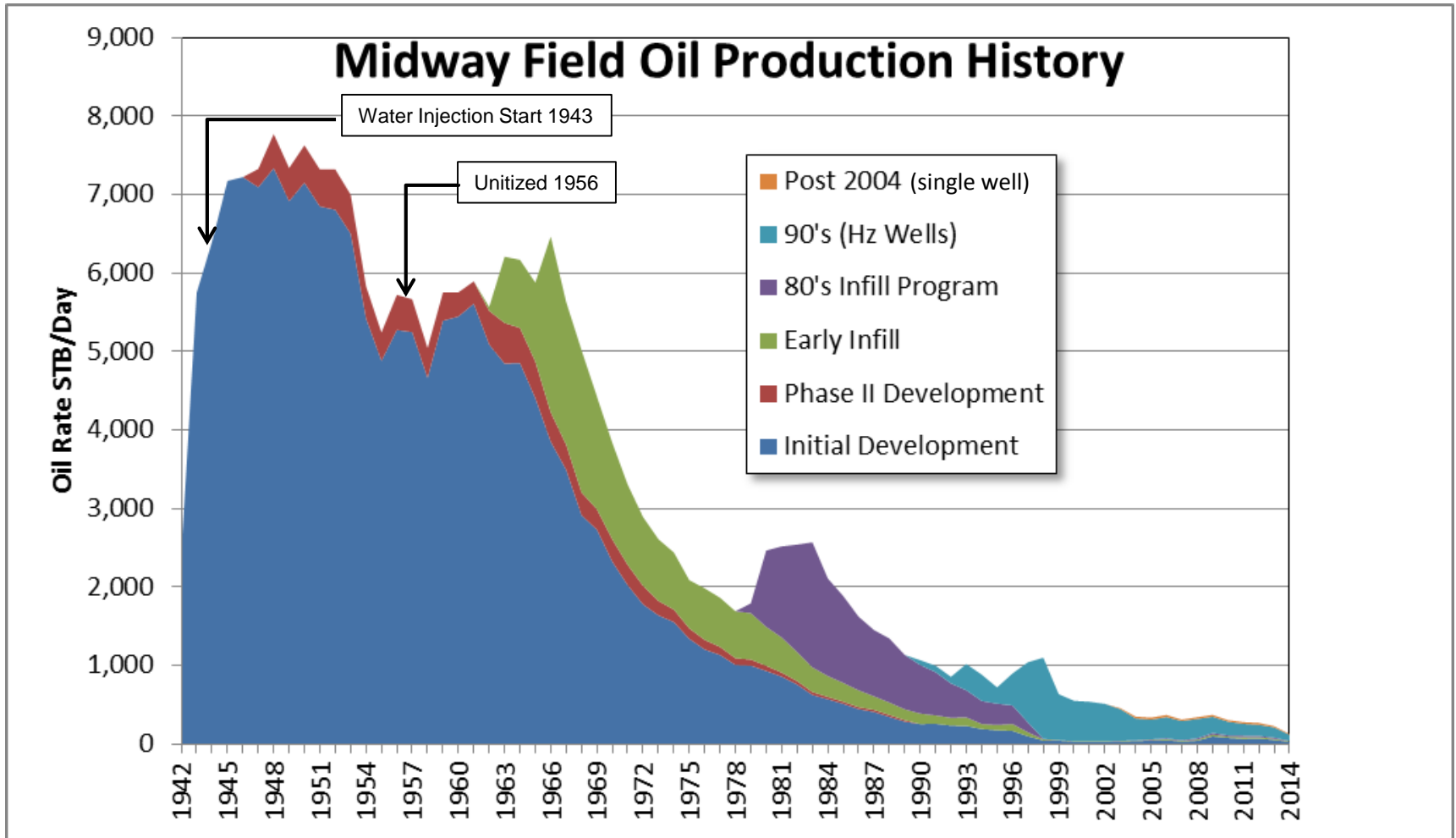


# Midway Unit





# Midway Field Oil Production History







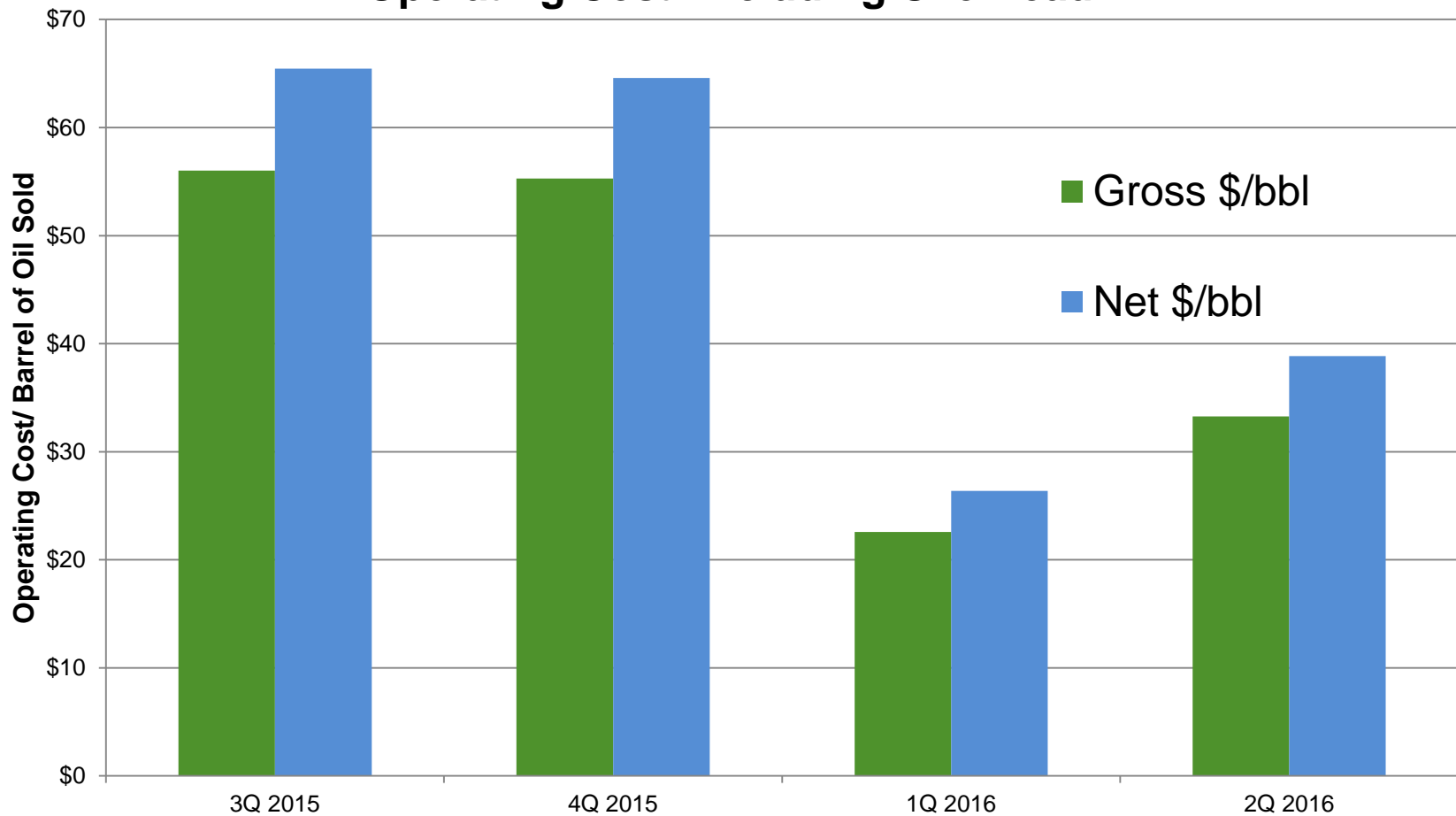
# Midway Field – Current Status

- Currently producing ~155 bbl/day of 35° API Oil from Smackover carbonate
- Produced under waterflood since early in field life
  - Cumulative production 86 million bbls
  - Performance indicates excellent reservoir connectivity and conformance.
  - Reservoir Pressure maintained over field life
  - Waterflood recovery to date is 51% of OOIP
  - Waterflood performance history-matched in full-field reservoir simulator
- Operating Costs Reduced Significantly
  - Optimized WF by reducing water injection volumes
  - Repairs done by staff rather than contractors
- 101 wells:
  - 28 Producing; 27 Water Injection
  - 41 Shut-in for low oil prices or watered out; 5 Shut-in for mechanical integrity



# Reducing Expenses

## Operating Cost Excluding Overhead





# Attractive CO<sub>2</sub> Development Opportunity

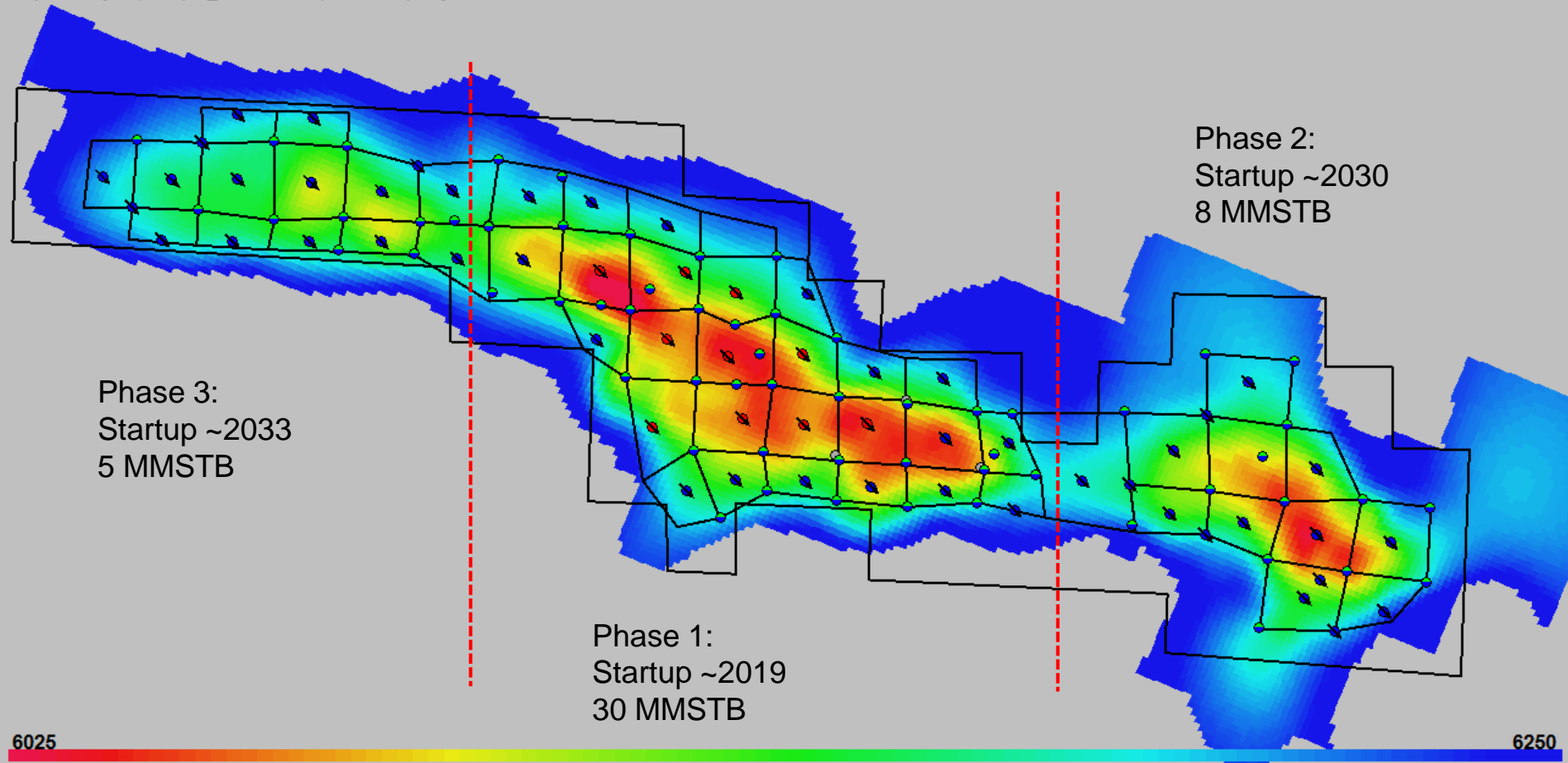
- > 40 MMSTB (gross) EOR oil reserves potential
- Attractive economics at current strip pricing
  - IRR >25%
  - MOIC >6
  - F&D/BOE ~ \$5/bbl (NAR)
- Current reservoir pressure exceeds miscibility pressure
- Oil Quality: Proven miscibility with CO<sub>2</sub>
- Significant CO<sub>2</sub> EOR oil target established by chemical tracer test, core data, cased-hole logging; validated with simulation history match
- Historical waterflood performance demonstrates excellent reservoir connectivity and conformance.
- CO<sub>2</sub> EOR Development plan ready
- Secure CO<sub>2</sub> supply contracted at attractive prices





# CO<sub>2</sub> EOR (WAG Flood) Development Plan

Depth : Layer (1,1,1) U\_Smackover:(269 82 35) Layer 1 2035/12/12 9:34:1



Phase 3:  
Startup ~2033  
5 MMSTB

Phase 2:  
Startup ~2030  
8 MMSTB

Phase 1:  
Startup ~2019  
30 MMSTB

6025

6250



# CO2 EOR Development Schedule

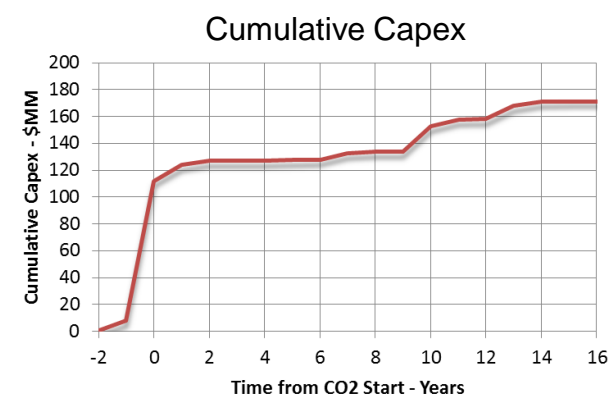
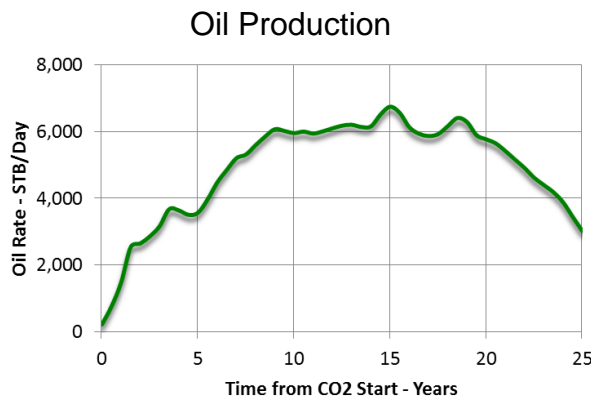
## ARKANSAS MIDWAY CO2 PROJECT

\* Phase 2 and 3 Wellwork (Post 2030) cost ~ \$25 MM

### Project Timeline

Months →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
<b>CO2 Supply Pipeline: Design &amp; Build (\$21 MM)</b>																																
Pipeline Row, Survey, Environmental																																
Engineering																																
Procurement																																
Construction																																
<b>CO2 Supply Capture Facility: Design &amp; Build (\$23 MM)</b>																																
Engineering																																
Procurement																																
Construction																																
<b>Processing &amp; In-Field Facilities: Design &amp; Build (\$62 MM)</b>																																
Engineering																																
Procurement																																
Construction																																
<b>Drilling and Completion Phase I (\$23 MM)</b>																																
Initial Phase I Wells (Drill & Complete)																																
Post-Startup Phase I Wells																																
<b>Commissioning and Startup</b>																																
C&SU																																
<b>CO2 Injection Begins</b>																																
EOR Production Begins																																

Additional \$16 MM spend after 2028 →





# Contact Information

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